

## Reduced Diabetic, Hypertensive, and Cholesterol Medication Use With Walking

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### **Abstract**

**Purpose:** To assess the relationships of walking distance, frequency, and intensity to the prevalence of antidiabetic, antihypertensive, and LDL cholesterol-lowering medications use.

**Methods:** Cross-sectional analyses of 32,683 female and 8112 male participants of the National Walkers' Health Study, of whom 2.8% and 7.4% reported antidiabetic, 14.3% and 29.0% reported antihypertensive, and 7.3% and 21.5% reported LDL cholesterol-lowering medication use, respectively.

**Results:** Weekly walking distance, longest walk, and walking intensity were inversely related to the prevalence of antidiabetic (males:  $P < 0.001$ , females:  $P < 0.0001$ ), antihypertensive (males:  $P < 0.01$ , females:  $P < 0.0001$ ), and LDL cholesterol-lowering medications (males:  $P < 0.01$ , females:  $P < 0.0001$ ). Each medication remained significantly related to both walking intensity and longest weekly walk when adjusted for total weekly distance. Compared with men and women who walked at a speed of  $< 1.2 \text{ m} \cdot \text{s}^{-1}$ , those who walked  $> 2.1 \text{ m} \cdot \text{s}^{-1}$  had 48% and 52% lower odds for antihypertensive, 68% and 59% lower odds for antidiabetic, and 53% and 40% lower odds for LDL cholesterol-lowering medications, respectively, when adjusted for age, smoking, and diet. The longest usual weekly walk was a better discriminator of medication status than the total cumulative distance per week, particularly in men.

**Conclusion:** These results are consistent with the hypothesis that antidiabetic, antihypertensive, and LDL cholesterol-lowering medication use may be reduced substantially by walking more intensely and farther each week, and by including longer walks.